## **Graduation Projects for the academic year 2024-2025**

Project Title	Abstract
Wearable Technology	Our website is to sell advanced sensors into garments and accessories in order to enable continuous monitoring of health and wellness metrics. We seeks to address the growing need for more personalized health data, particularly in the areas of fitness, healthcare, and disease prevention. By leveraging the power of wearable technology, we aim to provide users with real-time insights into their physical activity, vital signs, and overall well-being. Ultimately, our goal is to empower individuals to take control of their health and guide them towards healthier and more active lifestyles.
JUIT-STUDENT GATE: AN AI- DRIVEN TUTORING SYSTEM	Al-driven tutoring systems have emerged as a promising approach to strengthen learning outcomes by providing personalized instruction and support to learners. Leveraging the capabilities of artificial intelligence (AI), these systems offer adaptive and individualized learning experiences that cater to the unique needs, preferences, and abilities of learners. In response to the evolving needs of IT students at Jazan University, we proposed an Aldriven tutoring system aims to revolutionize the learning experience by offering tailored support and resources. By harnessing the power of artificial intelligence (AI), the system will deliver personalized instruction, materials, tutorials, supporting videos, coding exercises, and more, directly addressing the specific requirements of each student's coursework. Through adaptive learning techniques, it will cater to individual learning styles and pace, ultimately enhancing student engagement and academic success. This innovative approach holds great potential to empower IT students at Jazan University, providing them with the necessary tools and assistance to excel in their studies.
Immersive Intelligence: AI-VR Fusion	This research paper delves into the integration of cutting-edge technologies, including Artificial Intelligence (AI) and Virtual Reality (VR), in the domains of sports, education, entertainment, and medicine, with a specific focus on building environments suitable for the tasks required in each field. The convergence of AI and VR is explored as a transformative approach to create tailored and immersive environments that enhance performance, learning, engagement, and medical interventions. In the sports domain, the paper examines how AI and VR technologies can be utilized to build training environments that simulate real-game scenarios, analyze player performance, and provide real-time feedback to optimize training methods. These technologies enable the creation of virtual arenas, digital coaching assistants, and interactive simulations that help athletes improve their skills and make data-driven decisions. In the education sector, the integration of AI and VR is explored for the development of virtual classrooms, interactive learning modules, and adaptive educational content. AI algorithms can personalize the learning experience based on the individual student's needs, while VR environments provide immersive simulations and virtual field trips that enhance comprehension and engagement. In the realm of entertainment, AI and VR technologies can be harnessed to build captivating virtual worlds, realistic gaming environments, and interactive storytelling platforms. These technologies enable users to immerse themselves in fictional narratives,

interact with virtual characters, and participate in dynamic and engaging experiences. In medicine, Al and VR are examined for their potential in building advanced medical training simulations, patient-specific virtual environments, and immersive therapy platforms. Surgeons can practice complex procedures in virtual operating rooms, and patients can undergo rehabilitation exercises in virtual settings tailored to their needs. VR environments can also be utilized for pain management and mental health therapies. The paper addresses the technical challenges and considerations involved in building Al and VR environments suitable for each domain, including data processing, user interface design, hardware requirements, and ethical considerations. It emphasizes the importance of interdisciplinary collaboration among experts in Al, VR, domain-specific professionals, and end-users to design and develop effective and user-friendly environments. Overall, this paper highlights how the integration of Al and VR can revolutionize sports, education, entertainment, and medical by creating tailored environments that enhance performance, learning, engagement, and medical interventions. Here are some examples of software and tools you can use:

- 1. Development Engines: The appropriate development engine provides a strong foundation for building VR-AI applications.
- 2. Programming Languages: The programming language you use depends on the engine you choose.
- 3. Machine Learning and Al Tools: You can use libraries and tools such as TensorFlow (https://www.tensorflow.org)
- 4. User Interface Tools: To design the virtual user interface (UI) and user interaction within the virtual reality environment.
- 5. 3D Design and Modeling Tools: To create 3D environments and shapes within the virtual application.

#### Rental Car Management System

This project aims to develop a user-friendly website that the car rental experience by providing a secure and efficient online platform. The website offers customers the convenience of searching, booking, and renting vehicles with ease, while ensuring the highest standards of data protection and legal compliance. Key features include categorized vehicle listings with detailed information, robust search and filtering options, secure user authentication, and secure payment methods. By prioritizing user safety and privacy, the platform aims to enhance trust and satisfaction for both customers and rental companies. Through intuitive design, seamless transactions, and adherence to regulatory standards, the website sets a new benchmark for online car rentals, optimizing the rental process for all stakeholders involved.

#### Social Engineering Defense Simulation (SEDS)

Social Engineering Defense Simulation (SEDS) represents a pivotal approach in contemporary cybersecurity education and training, aiming to fortify individuals and organizations against sophisticated social engineering attacks. This study proposes the design and implementation of a simulator tailored to expose users to diverse social engineering scenario, including but not limited to phishing calls and pretexting attempts. The simulators primary objective is to impart knowledge about prevalent social engineering tactics while fostering the development of effective strategies to identify and thwart manipulation endeavors orchestrated by cyber attackers.

	Through a bled of immersive experiences and interactive engagement, the simulator seeks to enhance users cognitive resilience, critical thinking skills, and adaptive response mechanism in navigating intricate social engineering landscapes. By incorporating ememnts of realism and dynamic feedback mechanisms, the simulator endeavors to cultivate a proactive defense posture, empowering users to proactively mitigate risks and safeguard against evaluating cyber threats. The proposed simulator represents a promising avenue for advancing cybersecurity resilience through experiential learning and practical skill development in combating social engineering vulnerabilities.
Takatf website	This project is about making it easier to rescue and take care of animals in trouble. We're creating a website where people can report animals that need help by sending pictures and where they are. Once a report is made, professionals will quickly go to rescue the animal. The rescued animals will get all the help they need, like medicine and care to get better. We also want to help them find new homes with people who will love them forever. Our goals are to make reporting easy, to respond fast, to give animals good care, and to help them find new homes. By using technology and working together, we hope to make life better for animals and find them happy homes.
Hajj and Umrah Management System	The "Hajj and Umrah Management System" is a comprehensive web-based platform designed to streamline the planning, booking, and execution of Hajj, Umrah, and Ziarat (religious visitation) experiences. The primary objectives of this project are to enhance the user experience, improve accessibility, and provide a trusted platform for individuals and groups seeking to fulfill their religious obligations. The project scope includes an intuitive and visually appealing website with a well-structured content and service organization, robust search and browsing capabilities, and multiple communication options for users. The system offers a diverse range of customizable package options, with a comprehensive database of available Hajj, Umrah, and Ziarat packages, and tools for users to personalize their choices based on preferences such as duration and accompanying services. Additionally, the project encompasses an integrated administrative system, featuring a centralized database to manage travel, accommodation, and visa information, as well as administrative interfaces to monitor and track operations and transactions. Ensuring security and compliance is a crucial aspect of the project. The system will implement strong security measures to protect user data and transactions and adhere to the relevant regulations and laws governing the Hajj and Umrah domains. Policies and procedures will be established to maintain the security and privacy of the platform. By leveraging technology and innovative features, the "Hajj and Umrah Management System" aims to revolutionize the delivery of Hajj, Umrah, and Ziarat-related services, positioning the website as a market leader in the industry and providing a trusted and reliable platform for individuals and groups to fulfill their religious obligations and spiritual aspirations.
BLOOD DONATION PLATFORM:	This project presents a new platform designed to facilitate blood donation and communication between donors and recipients. Donors, who are individuals registered on the platform, contribute to saving lives by donating blood. Recipients registered on the platform communicate with potential donors to request assistance.

ENHANCING
ACCESS AND
COMMUNICATION
FOR DONORS AND
RECIPIENTS

Administrators supervise and manage donor and recipient accounts while monitoring platform activity. Platform scenario with donors registering their data to contribute to life-saving efforts. Once registered, donor information is published on the platform. Recipients, upon accessing the platform, review donor profiles and submit donation requests. If the donor agrees, communication between the donor and recipient begins. Through this platform, individuals are empowered to actively participate in life-saving endeavors, promoting a community-based approach to blood donation. The platform's functionality simplifies the donation process, providing a seamless means of communication between donors and recipients. In addition, administrators ensure the smooth operation of the platform and facilitate effective communications between donors and recipients. Overall, this project emphasizes the importance of leveraging technology to enhance access to basic services while enhancing collaboration and communication within the community. By providing a platform for blood donation and outreach, we aim to make a beneficial impact on public health and well-being.

#### Al-based Chatbot Service for Jazan University's Students

The Al Chatbot Web App is an innovative platform designed to cater to a wide range of users, leveraging the capabilities of artificial intelligence to provide a versatile and interactive chat experience. This web application is not confined to business use but is accessible to all users, offering real-time, personalized communication and assistance. Powered by OpenAl's API, the chat gpt3 chatbot employs advanced algorithms and natural language processing to understand and respond to a diverse array of queries, ranging from general information requests for specific advice. The application features a user-friendly interface, allowing for seamless interaction with the Al chatbot. It stands as a testament to the fusion of user accessibility and cutting-edge AI, aiming to enhance information accessibility and provide a dynamic platform for learning, inquiry, and entertainment. In this work, we will create an ad-hoc chatbot service for jazan university's students to help answer their questions more effectively than traditional methods.

#### HARMONY HANDS BRIDGING SILENT VOICES

Communication between individuals who are deaf or mute and those who are not can be challenging. Traditional methods, such as writing or typing out messages, can be time-consuming and may not always be practical. This barrier in communication can lead to feelings of isolation and frustration among individuals who rely on sign language or non-verbal cues to communicate. The proposed project, "HarmonyHands: Bridging Silent Voices", aims to address this problem by developing a Python application that translates hand gestures and sounds into words. The application will use a camera to capture hand gestures and a microphone to capture sounds. Machine learning techniques will be employed to recognize specific sign language gestures and sounds, which will then be translated into words. The expected outcome of this project is a functional application that can accurately translate sign language gestures and sounds into words in real-time. This would significantly improve the communication process between individuals who are deaf or mute and those who are not, making interactions more seamless and efficient. By bridging the communication gap between different groups of people, this project has the potential to foster inclusivity and understanding. It could also open up new opportunities for individuals who rely on sign language or non-verbal cues to communicate, thereby improving their quality of life.

Halal Food Recognition Application	[Halal Food Recognition Application] is a cutting-edge solution designed to simplify the identification of pork derivatives and alcohol in products for Muslims adhering to halal dietary guidelines and individuals with allergies. Utilizing advanced image recognition technology and a comprehensive ingredient database, the application allows users to scan product labels with their smartphone camera, receiving instant analysis and alerts regarding any problematic ingredients. By providing accessible, accurate, and real-time information, [Halal Food Recognition Application] aims to empower users to make informed choices that align with their dietary preferences and health needs, fostering transparency, inclusivity, and peace of mind in their everyday lives.
Sentiment analysis through Twitter tweets Using artificial intelligence	This project aims to develop a website that utilizes modern technology in artificial intelligence and natural language processing to analyze sentiments and emotions in Twitter users' tweets. This website provides a deeper understanding of users' trends and opinions across the Twitter platform, analyzing their interactions and responses to specific topics, aiding individuals, companies, and institutions in making informed decisions and developing strategies based on the insights and data derived from the project. The project employs the latest machine learning and natural language processing techniques to achieve maximum accuracy and efficiency in sentiment analysis, making it a valuable tool in understanding prevailing trends and identifying responses to public discussions on the Twitter platform.
Student Management System	The Student Management System is a comprehensive solution designed to streamline and automate student record management and administrative tasks within educational institutions. The existing manual processes are prone to errors and inefficiencies, leading to challenges in managing student information and communication. The proposed system provides a centralized platform for administrators to efficiently add, update, and delete student records, manage classes, generate reports, and send notices. Students have convenient access to their personal information and important notices. The system utilizes modern web technologies such as HTML, CSS, JavaScript, PHP, and MySQL to deliver a user-friendly and responsive experience. By automating administrative tasks and centralizing data, the Student Management System enhances efficiency, accuracy, and communication within educational institutions.
Al_Emotion_Detector Application	This project introduces a smart app for Android phones. The application uses artificial intelligence, specifically machine learning. The artificial intelligence model was trained on dataset that contains a wide range of visual data (a number of images for each emotional state). After training the model, it was used in the application. The app combines fancy technology with the study of human feelings to help you understand yourself better and connect with others more deeply. It's an easy-to-use tool that shows what you're feeling and can help you express yourself better.

Online Dental Clinic Appointments And Records Management System	Our project aims at creating an application which will automate the process in Dental Software. Using this it is possible to keep a track of a database for clinic like information about the patient like appointment schedule, personal records, previous medical records, treatment records, prescriptions, case reports and images. The dental software is used for collecting, managing, saving, and retrieving medical information for the patients, and for creating reports for the patients. Patient records are used by the dentists in order to organize the records of the patients in their practice. System Admin can login to system using login name and password to edit the dentists accounts and to view the patient's information and he can create information reports. Patient user can register online to create his/her profile, after login patient can view his /her medical records including dental history,
	treatment and images, patient can create appointment online and manage his appointments. Dentist login to system to view and manage his patient's medical records information and manage the patient's appointments. Dentist will create and edit the patient visit medical records, he must write in each record the medical diagnosis and medical procedure carried out and upload dental images.
Your Perfect Place	This project aims to develop an innovative digital application called "Your Perfect Place" using Flutter with the Dart language and Android Studio. The application focuses on facilitating the process of discovering suitable halls and chalets for users without the need to visit the sites in the field, which saves time and effort. The application will provide a comprehensive database containing a variety of halls and chalets with precise details about space, facilities, and reservation costs, in addition to direct contact information with place owners. Users will also be able to compare available options based on their needs and budgets, giving them greater flexibility in decision-making. The application contributes to improving the user experience by providing an easy-to-use interface that allows smooth and direct interaction with data, which makes the search and selection process more effective. The project also seeks to provide a technical solution that supports the community in organizing events and celebrations faster and more efficiently, by offering a wide range of options and the ability to access information with complete ease through the application.
Food Allergy Detection and Analysis Application (FADA)	The Food Allergy Detection and Analysis Application is a mobile solution designed to help users identify potential food allergens through image and text recognition. By utilizing the device's camera, the application analyzes food items and compares them against a comprehensive allergen database to provide real-time feedback on potential risks. The app is particularly beneficial for individuals with known allergies, helping them avoid unsafe foods quickly and efficiently. In addition to allergen detection, the application includes an educational content designed to raise awareness about food allergies. The project utilizes technologies like Flutter for cross-platform development, MySQL for backend services, and image recognition APIs, ensuring a robust and responsive user experience.
Student Portal for Graduation Project	The Student Graduation Projects Portal is a platform designed to streamline the project completion process from idea generation to final implementation. It provides guidelines for selecting the project idea, along with other

guides that help students. It clarifies the types of projects, highlights frequently asked questions and provides answers to them, and offers a roadmap showing the sequential steps of project implementation. The platform hosts an archive of past projects, allowing students to review, evaluate, comment, and learn from them. Additionally, it provides a list of supervisors, enabling students to select a suitable supervisor based on their specialization and availability. This feature simplifies the selection process, ensuring alignment between the supervisor and the project idea. The process of selecting a supervisor begins with students sending a request, after which supervisors have the option to accept or reject it. This portal ensures that students proceed with their graduation projects with confidence and efficiency.

#### University Course-Specific AI Chatbots Platform

This project proposes the development of AI chatbots tailored to individual university courses, aimed at enhancing the educational experience by providing personalized support and information to students. The increasing complexity of academic curricula necessitates innovative solutions to assist students in managing their coursework effectively. The primary objectives of this project are to improve course-specific support, enhance student engagement, streamline communication, promote independent learning, and boost academic performance. The project will utilize a combination of front-end technologies (HTML, CSS, JavaScript) and backend technologies (Node.js) to develop a scalable and efficient AI chatbot system. Each chatbot will be designed to address specific topics, assignments, and frequently asked questions pertinent to its respective course. The anticipated outcomes include efficient academic assistance, improved student satisfaction, reduced workload for instructors, and enhanced academic performance. The chatbots will assist students with inquiries related to lectures, deadlines, and study materials, and offer guidance on course-related issues. By facilitating better communication between students and course materials, the AI chatbots aim to reduce the necessity for direct instructor intervention in common queries, thus fostering self-reliant study habits. This dynamic and interactive platform is poised to cultivate a community of learners who are better prepared, more engaged, and more independent in their academic pursuits.

#### A Central Hub for Seamless Occasions Coordination Planning and Management

Event planning and coordination involve complex processes that require the management of various components such as bookings, service providers, client communication, and event logistics. This project, "A Central Hub for Seamless Occasions Coordination Planning and Management," aims to provide a comprehensive and user-friendly platform that simplifies event management for all stakeholders involved. The system is designed to cater to Administrators, Service Providers, Clients, and Guest Users, each with specific functionalities. The platform allows administrators to manage event halls, services, bookings, client details, and inquiries efficiently. Service providers can update hall availability, manage event details, and communicate with clients directly. Clients can book services and halls, manage bookings, and communicate with service providers seamlessly, while guest users can view available services, halls, and send inquiries. The platform incorporates features such as a dashboard for event summaries, a secure login system, real-time communication tools, and payment tracking for completed bookings. By integrating these features, the system aims to enhance the efficiency of event planning,

	reduce operational errors, and foster seamless communication between all parties involved. The platform's scalability and adaptability make it suitable for handling events of various sizes, providing a centralized solution to modern event management challenge.
Geo-Enabled Attendance MY PRESENCE: Revolutionizing Classroom Presence Tracking	In academic institutions, accurate attendance tracking is crucial for maintaining academic standards and ensuring student participation. Traditional methods often face challenges, such as inefficiencies, errors in manual data entry, and opportunities for falsification. This project proposes Student Attendance Registration System, leveraging GPS technology to address these issues and modernize the process for Jazan University. The system enables students to register their attendance by verifying their physical location in classrooms using their mobile devices. Instructors can access attendance records in real-time, manage discrepancies manually, and generate reports effortlessly. The application also provides additional tools, including a campus guide for new students and event updates to keep the university community informed. By streamlining attendance tracking and integrating useful features, the proposed system enhances efficiency and reliability, making it a significant step toward digital transformation in education.
Student Management System (HETAF)	Hetaf is a robust solution aimed at optimizing and automating the management of student records and administrative operations within educational institutions. This system offers a unified platform for administrators to manage student records effectively, allowing them to add, update, and delete information, oversee class schedules, generate reports, and distribute notices seamlessly. Students benefit from easy access to their personal details and important notifications. Utilizing modern technologies like HTML, CSS, JavaScript, PHP, and MySQL, the system provides a responsive and user-friendly interface. By centralizing data and automating tasks, Hetaf improves accuracy, operational efficiency, and communication across educational environments.
Elderly Care Mobile App (ECMA)	This project aims to develop an integrated mobile application specifically designed to assist elderly individuals in managing their health, education, and daily needs. The application offers a comprehensive solution by combining health monitoring, literacy, and religious education, and e-commerce services into one accessible platform. Through the app, users can track vital health indicators such as blood pressure and blood sugar, with an Al-driven system powered by Convolutional Neural Networks (CNN) that alerts them and their caregivers in case of abnormal readings. The CNN technology enhances the app's ability to accurately analyze health data and detect critical health conditions in real-time. The app also features educational resources, including programs for literacy, numeracy, and religious learning, with remote supervision available. Additionally, an e-commerce module allows elderly users to safely and conveniently purchase medications, food, and other essentials, with direct support if needed. This application addresses the unique challenges faced by elderly individuals by offering a simple, user-friendly interface that integrates key services to enhance their quality of life. By providing tools for continuous health monitoring, timely medication reminders, educational opportunities, and easy access to necessary goods, the application aims to promote independence, comfort, and well-being for elderly users. The app implementing

	this idea will be developed using Flutter to create a cross-platform mobile application, ensuring compatibility with both Android and iOS. Firebase or MySQL will be utilized for real-time database management, cloud storage, and authentication, while AI and machine learning algorithms (CNN) analyze health data and trigger alerts for abnormal readings. Additionally, Django will power the backend, handling data processing and security, ensuring a seamless and efficient user experience.
MANAGING AND ORGANIZING CONSTRUCTION PROJECTS	This project presents a comprehensive system designed to manage and organize construction projects. The system integrates time management, team coordination between employees and professionals, and resource allocation to improve workflow efficiency. The system was specifically developed to address common challenges in the construction industry, including poor communication, mismanagement of resources, and delays. By providing a platform that facilitates access to specialists, offering evaluation and review systems for professionals, and diversifying service options for maintenance and construction works, whether large or small projects, the system aims to enhance cooperation between project owners, contractors, and skilled workers. The system also includes features for tracking progress, managing schedules, and assigning tasks to ensure that project goals are achieved on time and within budget. With its easy-to-use interface and powerful database, it offers a practical tool to improve project outcomes.
Wasel – Linking Between Graduates, Training Institution and Jazan University	The "Wasel" project is designed to create a platform that connects graduates, training institutions, and universities, aiming to streamline the process of internships and professional training. The platform facilitates communication between graduates and training providers, helping graduates find internships that align with their academic background and career aspirations. It also allows universities to monitor and manage the training progress of their graduates. The platform enables graduates to explore available internships, apply for positions, track their application status, and manage their training experiences. On the other hand, training institutions can post available internship opportunities and review applications, while universities can oversee the overall process, ensuring that both academic and industry requirements are met. "Wasel" is focused on improving the internship process by making it easier for all parties to collaborate. By simplifying the connection between graduates and the professional world, the platform aims to ensure that graduates are better prepared for their careers after graduation.
Signdally: Bridging Communication Gaps for the Deaf and Mute Community	Communication barriers pose significant challenges for the deaf and mute community, limiting their ability to interact with society and access essential services. Signdally is an AI-powered web-based application designed to bridge these gaps by providing real-time sign language translation. Using the YOLOv5 object detection algorithm and a dataset from Arabic Sign Language (ArSL21L), the system accurately recognizes and translates sign gestures into readable text. In addition to translation, Signdally offers key features such as a social interaction platform, emergency access services, and an educational library for learning sign language, ensuring inclusivity for all age groups. Built with Flutter for cross-platform accessibility and Firebase for database management, the

	application adheres to high accessibility standards while maintaining fast response times and data security compliance. By integrating Al-driven solutions with an intuitive user interface, Signdally aims to enhance communication, foster inclusivity, and improve the quality of life for individuals with hearing and speech impairments.
Discover frauds by proof callers from government or institutions identity (ProtectMe)	This innovative project aims to develop a smart application designed to bolster public trust in electronic government interactions. By providing an efficient solution to the challenge of instantly identifying government agencies, the application leverages a robust algorithm to match incoming call numbers against a comprehensive database of official government contact information. Upon receiving an incoming call, the application promptly analyzes the phone number and cross-references it with the extensive database. If a match is found, the application immediately displays the name of the government agency, enabling users to verify the caller's identity and safeguard themselves from fraudulent activities impersonating government entities. This cutting-edge technological solution offers numerous benefits to both citizens and government agencies. It fosters a high level of trust between the public and the government, promoting transparency and integrity in government transactions. Moreover, it provides robust protection for citizens against fraudulent schemes aimed at stealing personal information or extorting funds.
Student Hub Website	Student Hub Website, will act as a personal assistant to facilitate the resolution of problems that students face during their university journey. For example, new students often face challenges in knowing how and when to register, in addition to not realizing the possibility of organizing their study schedules in advance. When registration opens, many students face conflicting times for arranging schedules, which leads to them being in a hurry and dissatisfied with their schedules. The website will provide guidance and advice for these problems. Some students also suffer from delayed responses to their inquiries, such as questions about the start dates of the semester, as they may wait several days for an answer. This is where our website comes in, which is characterized by a quick automated response service to inquiries. The website will also include a section dedicated to important announcements such as conferences and competitions, which many students may miss. In addition, the platform will provide chat rooms for students to discuss various academic topics, which enhances the exchange of ideas and contributes to solving problems more quickly. The website will also include a comprehensive library of easily accessible courses and There is a feature for students to explain the materials.
International Students in Saudi Arabia	As Saudi Arabia emerges as a prominent hub for higher education, attracting a diverse community of international students, the demand for tailored support services has seen a marked increase. These students, arriving from various cultural and academic backgrounds, often face challenges in adapting to a new environment, which can include differences in language, academic expectations, and social customs. To ensure their successful transition and integration into Saudi society, it is essential to provide comprehensive resources that address both their academic and personal needs. so this project aims to develop a web platform tailored specifically for international

	students arriving to study in Saudi Arabia. The platform is designed to ease the transition and integration process by providing essential resources and services related to education, daily life, and social adaptation. The platform will offer a cultural guide, academic support, and practical information on topics such as transportation, housing, healthcare, and shopping. Additionally, the platform will feature interactive forums and multilingual support to facilitate communication and peer-to-peer engagement. By addressing both academic and personal challenges, this platform aims to enhance the overall experience of international students, helping them adapt quickly and efficiently to their new environment.
Student Portal for Graduation Project	The Student Graduation Projects Portal is a platform designed to streamline the project completion process from idea generation to final implementation. It provides guidelines for selecting the project idea, along with other guides that help students. It clarifies the types of projects, highlights frequently asked questions and provides answers to them, and offers a roadmap showing the sequential steps of project implementation. The platform hosts an archive of past projects, allowing students to review, evaluate, comment, and learn from them. Additionally, it provides a list of supervisors, enabling students to select a suitable supervisor based on their specialization and availability. This feature simplifies the selection process, ensuring alignment between the supervisor and the project idea. The process of selecting a supervisor begins with students sending a request, after which supervisors have the option to accept or reject it. This portal ensures that students proceed with their graduation projects with confidence and efficiency.
Secure Community- Based Encryption and Decryption Platform	The project's goal is to create a safe online community where members may utilize different encryption algorithms to encrypt and decrypt private text conversations. Through the platform, users may establish a safe shared account where they can trade data without risk. It is possible for User A to establish a shared account and ask other users to sign up. The sender encrypts the text in the platform and distributes it across any communication channel when sending sensitive material. In order to decode the communication, the receiver then logs onto the platform. The platform has several security features, including:  • Two-factor authentication (2FA) using email or phone number.  • Data that is encrypted or sensitive is only kept for a maximum of three days.  • Notifications are sent to users anytime someone logs in or out of the site.  With data privacy and user security guaranteed, this project provides a workable method for safely exchanging sensitive information in an encrypted manner.
Web-Based Driving Techniques and Teachings with Personal Trainers	Given the fact that Saudi women do not get appropriate driving opportunities, they eventually lack developing driving skills. Besides, the driver's law experience is one of the underlying reasons for causing road crashes. Driving schools for women help in reducing the problem by providing quality-oriented driving experience. However, trainees must wait for a long period to get a license in these training centers, which is why some ladies tend to resort to untrustworthy trainers to save time. Because of the complexity of the problem for female drivers,

	a website would be a good supportive solution for those who want to get trained at any time to have the necessary skills and official license to drive safely in the future. The purpose of our project is to assist women in saving time by obtaining quality training services at any time, as well as saving money by using credible and reliable technological solutions to date.
Nutritional Consultations (Balance)	This project involves the creation of an AI nutrition platform that will be used to prescribe nutrition and exercise regimes, inclinations and objectives. The platform includes an artificial intelligent chatbot that elicits necessary user information including their dieting, fitness and IG profiles, and any health complications. Using a set of questions, the chatbot helps the users to navigate through the site while still allowing them to make their own decisions. Third, the Bot checks the data entered to ensure that all recommendations are safe for users with specific diseases. The platform analyzes, collects and aggregate data in creating the client's diet and exercising schedules. These plans are always reviewed according to the feedback from the users, the progress and if they have changed their goals. Users are also free to make changes with the help of a chatbot, which can suggest a new plan based on the data obtained now. However, the platform also promotes the interaction of the community with other users as well as their friends. Clients can post their diet/nutrition/exercise and communicate with other like-minded individuals in the community, engage in workout challenges or exchange ideas in conversations. This is a great community feature that facilitates participation among the users on the platform.
VR Majors Experience	The Virtual Reality Game for Choosing University Majors project aims to transform the process of selecting a university major into an enjoyable and interactive experience. The game offers an immersive virtual environment that allows students to explore different academic disciplines as if they were already studying them. Students can experience university life by attending lectures, participating in scientific experiments, and interacting. This game contributes to inspiring students and encouraging them to explore various options available to them before making a final decision about their university major, This help students to gain a clear understanding of the nature and demands of each major, contributing to more accurate academic and career decisions.
LAUNCH POINT	The transition from academia to the professional world presents numerous challenges for graduates, including limited access to career guidance, difficulty in finding relevant job opportunities, and a lack of easily accessible educational resources tailored to their needs. This platform is specifically designed to address these issues by providing a comprehensive solution aimed at facilitating a .seamless and efficient transition The platform offers a range of essential tools and resources to support graduates in their career journey, empowering them to make informed decisions and take actionable steps toward professional success. Some of the key features of the :platform include Personalized Professional Consultations: Users can book one-on-one consultations with industry experts and career counselors to receive tailored advice on job search strategies, resume building, interview preparation, and career planning Training Course Aggregation: The platform offers access to both free and paid courses from leading educational providers, enabling graduates to upskill and stay competitive in the

job market. The courses cover a wide range of topics, including .technical skills, soft skills, and industry-specific knowledge Extensive E-Library: The platform includes an aggregated electronic library of high-quality academic and professional resources. This e-library provides access to books, research papers, tutorials, and other learning materials that support continuous education Job Portal with Advanced Features: The job portal offers a centralized place for graduates to search for job opportunities across multiple platforms. It includes advanced search and filtering tools that help users find positions tailored to their qualifications, preferences, and career aspirations in addition to these features, the platform emphasizes ease of use and accessibility, ensuring that graduates from diverse backgrounds can navigate and benefit from the available resources. By combining professional consultations, educational content, mentorship, and job opportunities, the platform aims to .bridge the gap between academic preparation and career success.

#### DEVELOPING AN APP FOR SMART PLANT POTS.

In the era of advanced technology and the increasing reliance on smart solutions in various fields of life, home gardening and sustainable agriculture have become an essential part of many individuals and institutions' lives. With growing interest in the environment and preserving plant health without relying on harmful chemicals, the need has arisen for innovative solutions that combine technology with traditional agriculture. From this perspective, the project of developing an application to integrate a smart pot with an insect-repellent sensor emerges as one of the promising solutions in this field. The smart pot is a device specifically designed to provide an ideal environment for plants, controlling humidity, soil, and lighting to ensure healthy and sustainable growth. With the introduction of modern sensors, the smart pot can evolve to include new features that protect plants from harmful insects without the need for conventional pesticides. This is where the insect-repellent sensor comes into play, relying on sound frequencies to repel insects, thereby maintaining plant health and promoting organic and clean farming. The aim of this project is to develop a smart application that enables users to control the functions of the smart pot, including the insect-repellent sensor, through their smartphones or tablets. The app offers a simple and user-friendly interface, allowing individuals to monitor the status of their plants and take the necessary actions for their care, such as adjusting sound frequencies or modifying irrigation and lighting settings. Through this integrated system, users can benefit from modern farming without the need for constant manual intervention, saving time and effort while fostering interest in home gardening. This project not only aims to make plant care easier but also seeks to contribute to Saudi Arabia's Vision 2030, which emphasizes afforestation and sustainable agriculture as part of future environmental solutions. By developing this type of smart technology, local startups and farmers can adopt the idea and create new products that enhance the agricultural environment and increase productivity in an eco-friendly way. In the end, this project represents a step toward transforming agriculture into a smart, sustainable, and environmentally friendly experience, encouraging the spread of home gardening and supporting a long-term vision to improve the quality of life and preserve natural resources.

YOUR-WAY Platform: A Smart Travel Booking and Recommendation Website	The YOUR-WAY Platform is a smart travel booking and recommendation website aimed at revolutionizing the way users plan their trips. It offers an all-in-one solution for booking flights, accommodations, and activities while providing personalized recommendations based on user preferences and past behaviors. The platform integrates user-generated reviews and ratings to help travelers make informed decisions. Additionally, strong security measures are implemented to ensure safe financial transactions and protect user data. The project uses modern web development technologies, such as HTML, CSS, JavaScript, PHP, Node.js, and Firebase, to create a scalable, secure, and user-friendly system. This abstract outlines the key aspects of the platform, focusing on its functionality, security, personalization, and continuous improvement mechanisms that ensure a seamless and tailored travel experience for users.
The Complete Guide to Selecting Graduation Project Idea	The idea of our graduation project was to develop an online electronic system to be an assistant and guide for all IT students and their various specializations in order to view the latest graduation project ideas that provide services to the community and institutions. Our proposed system will also provide sufficient details to develop the system and choose the appropriate development environment and technologies to implement the idea. The proposed system is online website, web-site front-end is web-pages using HTML, for server side functions PHP is used and the system back-end is MYSQL database server. Students can register on the system website to create his/her account, after login student can view the supervisor's information like his contact information, supervisor's interested type of projects and a list of projects proposed by the supervisor, so student can select his project with supervisor. The system admin is responsible to manage and edit the supervisors accounts, admin can add, delete and update supervisor account. Supervisor can login to system to edit his profile and add his interested type of projects, he can suggested ideas for graduation projects.
Jazan Online Auction Project	The Jazan Online Auction Platform is a web-based system tailored specifically for the Jaza region, offering a streamlined marketplace for buying and selling items through real-time auctions. The platform aims to address the limitations of global auction platforms by incorporating features that cater to the region's specific needs. These include bilingual support (Arabic and English), localized payment options such as Mada and STC Pay, and robust fraud prevention mechanisms using Al-powered monitoring and two-factor authentication. Through the use of WebSocket's, the platform provides real-time bid updates and live auction tracking, creating an engaging and competitive user experience. Additionally, seller reviews and ratings foster trust and ensure a credible marketplace. The mobile-optimized design ensures accessibility for users on smartphones and tablets. This platform offers an innovative solution to promote e-commerce within the Jazan region, providing both buyers and sellers with a secure, efficient, and region-focused online auction experience.
Cyber Threat Classification Using Machine	This project presents the design and evaluation of a machine learning-based system for cyber threat classification using the realistic and complex ToN_loT dataset. The system tackles two key tasks: binary classification (malicious vs. benign) and multi-class classification (specific attack types). A total of six machine learning models

#### Learning Techniques

were trained and evaluated—Random Forest, Decision Tree, KNN, MLP, Logistic Regression, and Linear SVM. Among these, Random Forest achieved the highest accuracy in both scenarios: 99.93% for binary classification and 98.90% for multi-class. Tree-based models (Random Forest and Decision Tree) achieved the highest accuracy in both tasks. The project pipeline includes thorough preprocessing, stratified data splitting, and exporting the trained model and cleaned data for future deployment. The results confirm the robustness of tree-based models and highlight the importance of handling class imbalance. This work demonstrates a scalable, automatable, and reliable approach for real-world cybersecurity applications.

#### SecureDrive Website

As vehicles become more connected and increasingly dependent on advanced technologies such as onboard computers, GPS navigation, internet connectivity, and autonomous driving systems, the risk of cyber-attacks targeting automotive systems has escalated significantly. Modern vehicles now communicate with various external networks, making them more vulnerable to potential security breaches. Cyber attackers can potentially gain access to critical vehicle functions, including braking systems, engine control, or navigation, which could lead to dangerous outcomes. As the automotive industry continues to evolve with the integration of smart technologies, addressing these cybersecurity risks has become a vital priority to ensure the safety and security of both drivers and passengers. SecureDrive is a cybersecurity-focused website designed to help protect vehicles from these evolving threats. The platform offers a range of tools and resources, including risk assessments, vulnerability scanning, and best practices for vehicle cybersecurity. Additionally, SecureDrive provides continuous updates on new and emerging threats, helping users stay informed about the latest developments in automotive cybersecurity. By educating vehicle owners, manufacturers, and cybersecurity professionals, SecureDrive aims to enhance vehicle security, ensuring safer and more resilient automotive systems in the face of rising cyber threats.

### Lecturer's Guide to the Curriculum

This application aims to enhance user experience through a user-friendly, intuitive interface that facilitates smooth and direct interaction with data, thereby making teaching and presentation processes more effective. Designed specifically to support Jizan University's educational activities, the application connects to all screens in lecture halls, including those in the computer section, creating an integrated and efficient learning environment. The application addresses common challenges faculty face, such as excessive time spent displaying and navigating complex slides for students. Often, revisiting these slides can be cumbersome, and updates may be delayed, which risks content stagnation. By centralizing slides and other educational materials, this application enables faculty to navigate course content more easily, view recorded content on demand, and update complex slides as needed. Such features streamline the learning process, foster continuous improvement in educational content, and support innovative interaction with course materials. Instructors can log in with their credentials to access assigned materials according to a predefined university schedule. This system offers a wide range of options, supports easy access to information, and encourages innovative learning. The application's development relies on robust technologies, including, dart, and flutter to achieve these goals effectively.

Tourism in Saudi Arabia	This project aims to develop a comprehensive tourism website that promotes Saudi Arabia as a premier travel destination, in alignment with the Vision 2030 initiative. The website will highlight the country's rich cultural heritage, historical landmarks, and diverse natural landscapes, serving as an essential resource for both international and domestic travelers. To enhance user experience, the platform will feature interactive maps, detailed descriptions of attractions, and integrated booking options. Additionally, it will offer multilingual content to accommodate diverse audience, fostering greater accessibility and engagement. The project's objectives also include encouraging community involvement in content creation and promoting sustainable tourism practices. By addressing existing gaps in available tourism resources, this initiative seeks to positively impact the local economy and cultural heritage while contributing to the growth of Saudi Arabia's tourism sector.
TBC "The best choice for beauty"	Finding the right hair, skin and body care products can be frustrating and time-consuming for many people. Choosing the wrong products often leads to wasted money, effort and disappointment when the results don't meet expectations. To address this, we are developing a website that simplifies the process and ensures users find exactly what they need. Included on the platform will be an easily navigable set of questions and answers where users can describe their individual troubles, whether it is dry skin, hair loss or any other concerns. According to the results, the program will utilize state of the art artificial intelligence to produce highly precise user-focused analysis of their responses and then make a product recommendation accordingly unique to that individual. This project is focused on making self-care smarter and more effective, helping users confidently choose the right products for them without trial and error. This project is focused on making self-care smarter and more effective, helping users confidently choose products that work for them without the trial and error. But that's not all. To ensure users stick to their daily routine and achieve the results they want, the system will send regular reminders, helping them stick to their daily routine. Users will also be able to leave reviews and ratings for recommended products, creating a space for honest feedback and shared experiences. This community-driven feature allows everyone to make more informed decisions and get better results. By solving problems like generic recommendations, lack of follow-up, and limited guidance, this project offers a smarter, personalized, and engaging way to take care of hair, skin, and body. It's not just about recommending products; it's about helping people achieve real results with tools and support designed for them.
Faculty Content Management System	This project aims to develop a Faculty Content Management System (FCMS) to enhance the management and presentation of information related to faculty members in academic institutions. In an era where effective communication with the global academic community is increasingly vital, the system provides a platform that enables faculty members to independently update their information, fostering greater engagement with students and peers. The system will include multiple features, such as the ability to update resumes, teaching activities, research, publications, and awards. This information will be readily accessible online, making it easier for researchers and students to discover and recognize the achievements of faculty members. By presenting this

	information in a clear and user-friendly manner, the project will enhance transparency and encourage knowledge sharing among individuals and institutions. Moreover, the system will contribute to bolstering the institution's reputation at both local and international levels. By empowering faculty members to effectively showcase their accomplishments and contributions, institutions will be better positioned to attract talented students and collaborative researchers from around the world. The project also aims to support an open academic culture, allowing faculty members to publicly share their research and work, thus adding value to the collective knowledge and fostering an interactive academic community. With a focus on designing an intuitive and user-friendly interface, the system aims to improve user experience, encouraging greater participation and interaction from faculty members.
SPOTLOCATOR APPLICATION	The SPOTLOCATOR APPLICATION is an innovative mobile application designed to streamline the parking experience at **Jazan University**. Built for the Android platform, this application provides real-time information regarding available parking spaces across the university campus, helping users—students, faculty, and visitors—locate, reserve, and navigate to suitable parking spots. The primary objective of this project is to improve parking management at Jazan University, thereby reducing parking-related stress and enhancing convenience for all campus members. By providing a seamless experience, the SPOTLOCATOR APPLICATION aims to enhance user satisfaction and optimize the utilization of parking spaces, contributing to a more efficient campus environment.
VPN Application for Home Devices	This project introduces a mobile VPN app that secures internet connections using OpenVPN and enhances safety with Google Safe Browsing. It allows users to protect their mobile devices and configure VPN on supported routers to secure all smart home and IoT devices. The app also logs VPN usage for better tracking, offering a simple yet powerful solution for online privacy and network security.
Volunteering Management System (VMS)	Revolutionizing Volunteer Management: A Modern Approach: Volunteerism plays a critical role in addressing societal challenges and driving positive change. However, managing volunteers effectively remains a significant challenge for many organizations. This project introduces a modern, technology-driven solution designed to streamline volunteer management and enhance engagement. The proposed system leverages cutting-edge technologies such as Android applications and Firebase to provide a scalable, efficient, and user-friendly platform. Key features include:  • Automated Processes: Streamlining tasks such as recruitment, scheduling, and tracking.  • Real-Time Communication: Facilitating seamless interaction between organizations and volunteers.  • Data-Driven Insights: Offering analytics to measure impact and optimize processes.  • Certificate Generation: Automating the creation of certificates for completed tasks.

	By addressing the challenges of traditional volunteer management and building on the successes of existing systems, this solution aims to empower organizations and volunteers to achieve their goals and make a lasting impact.
Project Management Tool	Management tools are essential for organizational success in today's business world, helping address challenges through effective strategies to manage human, financial, and technological resources. Additionally, these tools enable individuals, such as students, to organize and schedule their projects effectively. By leveraging an intuitive user interface and real-time data updates, the tool is designed to address the complexities that arise in multi-team environments, ensuring that project timelines, milestones, and resource management are optimized. This project also aims to explore a variety of management tools, such as strategic planning, time management, and management information systems, and analyze their impact on organizational performance. Through the examination of practical case studies, the project will highlight how these tools can be applied to achieve efficiency and effectiveness. Understanding the effective use of management tools contributes to improving organizational performance and enhancing their ability to adapt to rapid changes, thereby increasing opportunities or sustainable success. Streamline processes, improve productivity and ensure timelines and budgets are adhered to This project examines the impact of modern project management software on organizational performance, focusing on key tools such as task scheduling, resource management, collaboration, and real-time data analytics. this research seeks to demonstrate how these tools contribute to the optimization of project outcomes and foster long-term organizational success.
Automated Vehicle System:A study of implementation and security	The rapid advancement of technology in the field of autonomous vehicles has the potential to revolutionize transportation systems worldwide. This project outlines the development of an autonomous vehicle system, emphasizing the integration of cutting-edge technologies such as artificial intelligence, sensor fusion, and real-time data processing. The system is designed to enhance safety, efficiency, and user experience while addressing key challenges including navigation, object detection, and decision-making in dynamic environments. Through a comprehensive analysis of existing methodologies and the implementation of a novel framework, this research aims to create a reliable, scalable, and secure autonomous vehicle solution. Key areas of focus include system requirements analysis, design of an effective algorithm for real-time processing, and evaluation of ethical considerations in autonomous decision-making. This project not only aims to contribute to the technological advancements in the automotive industry but also to stimulate discussion around the societal impacts of autonomous vehicles.
RoomieFinder	The RoomieFinder project aims to develop a mobile application designed to help users find compatible roommates based on shared preferences, interests, and lifestyles. The system allows users to create profiles, post room advertisements, and connect with potential roommates. The platform incorporates features such as messaging, user ratings, and roommate matching based on compatibility scores. The application is targeted for use in Saudi Arabia, offering a simple and efficient way for individuals to find and connect with suitable roommates in a secure

Events and Activities Management System (EAMS)	environment. The system's design focuses on user-friendliness, scalability, and integration with artificial intelligence to improve matching accuracy. Through this project, we aim to enhance the roommate selection process, making it more reliable and personalized.  The Event and Activity Management System (EAMS) is a web-based platform designed to enhance event management in Saudi Arabia, aligning with the Kingdom Vision 2030 initiative. With a focus on cultural adaptability and user-friendliness, EAMS addresses the unique needs of local event organizers, providing a comprehensive solution that spans the entire event lifecycle—from planning and budgeting to execution and post-event analysis. The platform supports various event types, including academic conferences and public festivals, with features such as bilingual (Arabic-English) support, real-time collaboration tools, and customizable marketing capabilities. EAMS aims to automate repetitive tasks, improve attendee experiences, and ensure data security, thus contributing to the growth of tourism, education, and business sectors in the Kingdom. While the system is initially tailored for small to medium-sized events, it is designed for scalability to accommodate larger gatherings in the future.
Hacking simulation to assess cybersecurity Awareness	A platform offers insight into user level of awareness and susceptibility to social engineering tactics. Based on performance, users receive personalized training recommendations to strengthen their cybersecurity skills. Administrators can access real-time dashboards with comprehensive data to monitor the effectiveness of the campaigns and allocate additional training based on user scores. Administrators can choose or customize fake email templates and fake pages to simulate common attacks such as phishing messages for awards or jobs. The platform includes tracking tools such as the spy pixel to monitor email opens and link clicks without users' knowledge. This approach ensures continuous improvement in cybersecurity awareness, helping organizations mitigate risks associated with human error.
Baby Adoption Web Application	The "Baby Adoption Web Application" is designed to make the adoption process smoother and more accessible for both prospective parents and orphanages. This platform will manage every step of the adoption journey, from the first inquiry to the final legal procedures, ensuring that all parts of the process are handled efficiently and transparently. For prospective parents, the application offers a user-friendly interface where they can browse detailed profiles of children available for adoption, submit their applications, and track the progress of their case in real time. On the orphanage side, the platform provides a secure and organized system to manage child profiles, review applications, and maintain direct communication with potential adoptive families. By preventing paperwork and reducing administrative delays, the "Baby Adoption Web Application" helps make the adoption process faster and more efficient. This modern solution offers a secure, transparent, and user-friendly experience, ultimately helping more children find their way into loving homes.
Rescue Eye	This project involves the development of a dynamic vehicle model equipped with various types of sensors, alongside the creation of a specialized application focused on emergency scenarios. Unlike conventional systems,

this model operates independently of the application, prioritizing the sensor's role in enhancing safety. The sensor is meticulously designed to detect conditions indicative of an accident. Upon detection, it activates a sophisticated alert system that communicates directly with emergency services using GSM technology, ensuring a prompt and efficient response. The application includes several interfaces to effectively manage emergency situations. One interface allows for the input and management of critical user information, such as name, age, blood type, and emergency contact numbers. This ensures essential details are readily available when needed, with each user provided a personal account containing this information. Additionally, the application issues two types of alerts in the event of an accident. The first alert includes a timer ranging from 1 to 3 minutes, allowing the user to cancel it if they are in a stable condition. If the user responds and cancels the first alert, a second notification appears, offering the option to contact "Najm" for accident investigation and assistance or to cancel the notification entirely, providing additional flexibility based on the situation.

# FixMyStuff Phone Application

This project introduces FixMyStuff, a mobile application specifically designed for the repair and maintenance of Android devices. Built for the Android operating system, FixMyStuff offers a user- friendly platform that allows customers to submit repair requests and choose between two service options: home pick-up by a representative or delivery to a partnered repair shop via a designated shipping company. Targeting the Jazan region and surrounding areas, FixMyStuff aims to deliver quick, efficient, and high-quality maintenance services, either at home or through trusted repair shops. With features like real-time service tracking, secure payment gateways, and a seamless booking process, the application prioritizes user convenience and satisfaction. Developed using modern technologies such as Flutter for the front end, Node.js for the backend, and Firebase for data management, the app ensures technical reliability, scalability, and a smooth user experience. By streamlining the repair service process, FixMyStuff demonstrates its potential to revolutionize device maintenance within the region, making it the go-to solution for Android device users seeking fast and dependable services.

#### Volunteer Management System

Volunteerism plays an essential role in promoting social responsibility, enhancing student engagement, and contributing to community development. The Volunteer Management System is a web-based application designed to streamline volunteer activities within Jazan University. It provides students with a centralized platform to explore, register, and track volunteer opportunities while helping organizers efficiently manage events and participation. The system links with the university's website, ensuring accessibility for both students and staff. It aims to enhance the university environment by fostering community involvement and recognizing students' contributions in academic certificates. The system is developed using HTML, CSS, JavaScript, PHP, Python, and MySQL to create an efficient, user-friendly interface that supports students and administrators alike. By encouraging participation in volunteer activities, the project promotes social interaction, develops practical skills, and creates a positive impact on both the university a d the community. This system lays the foundation for building a culture of volunteerism within the university, motivating students to engage actively in meaningful activities beyond their academic studies.

Donate surplus medicines (YOUR CHARITY PHARMACY)	The graduation research addresses the critical issue of limited access to affordable medicines in low-income and underserved communities, compounded by the global wastage of unused medications. To bridge this healthcare gap, the project proposes the development of a web-based platform that enables the donation and redistribution of surplus medicines. The platform facilitates individuals and charitable organizations in offering excess medications to those in need. Additionally, users can make financial donations toward humanitarian efforts aimed at improving access to essential medicines. The project's goals include reducing medicinal waste, promoting environmental sustainability, and fostering a more equitable and accessible healthcare system. By creating a secure, community-driven platform, this research seeks to demonstrate how technology can play a pivotal role in solving both healthcare access and resource management challenges
SmartFinder: Lost and Found Items Application	The SmartFinder: Lost and Found Items Application is a mobile-based platform designed to assist users in reporting lost or found items and facilitating the return of lost possessions to their rightful owners. The application leverages Al-powered matching algorithms to compare images of lost and found items, ensuring accurate and efficient identification of matches. Key features include user registration, real-time notifications, and direct messaging, which enable seamless communication between users. The app aims to create a reliable, secure, and user- friendly environment where individuals can resolve lost-and-found issues with ease. SmartFinder is intended to simplify the process of reuniting lost items with their owners while maintaining a high level of trust and credibility through a rating system.
Task Management System	The Task Management System is a web application designed to enhance productivity and organization for individuals and teams by effectively managing daily tasks. In today's fast-paced environment, effective task management is crucial for success, yet many individuals struggle to keep track of their responsibilities. This project addresses these challenges by providing an intuitive platform that allows users to create, edit, and delete tasks seamlessly The system offers the ability to categorize tasks by status, such as "In Progress" and "Completed," along with features for setting deadlines and reminders. These functionalities empower users to prioritize their tasks effectively, ensuring they focus on what matters most. Additionally, the system promotes collaboration by enabling users to share tasks and communicate with each other, thereby fostering teamwork and increasing overall productivity. This system is particularly beneficial for students, professionals, and small teams who require an organized approach to managing their daily tasks. By streamlining the task management process, the system not only saves time but also helps users achieve their objectives more efficiently.
Awonhm Application	This project aims to create a collaborative charitable application designed to assist people with special needs and the elderly by providing them with access to specialized tools and devices that better suit their individual requirements. Many assistive devices, such as mobility aids or medical equipment, are often unsuitable due to

issues like size, functionality, or other limitations. The proposed application bridges this gap by connecting donors with beneficiaries in need. Donors can easily upload photos and provide detailed descriptions of items they wish to donate, while beneficiaries can browse the listings, review the specifications, and select the items that meet their needs. The platform simplifies the donation process and ensures that beneficiaries can obtain the appropriate devices with minimal effort and only a small delivery fee. This project fosters community-driven support, improving the quality of life for individuals requiring specialized assistance.

### Smart Employees' Attendance System Based on Face Recognition

Verifying people's identity is one of the most difficult tasks that organizations face when the number of attendees is large, such as when university students are flocking to campus or guests are attending a party. Deep learning is a type of machine learning that uses artificial neural networks to learn from data. Artificial neural networks are inspired by the human brain, and they can be used to solve a wide variety of problems, including image recognition, natural language processing, and speech recognition. On the other hand, we find that artificial intelligence technologies have provided us with many technical ideas to facilitate the tasks of distinguishing objects by relying on precise and complex algorithms. Among these algorithms is the artificial intelligence network dedicated to distinguishing people based on a facial sample of the previously known person. The proposed system for (Smart employees' attendance system based on face recognition) will represent a major shift in the application of computer vision ideas to help Jazan university to quickly verify the employees face identity and enhance the attendance process management using the face recognition computer that by recognizes employees' face through a live camera and in the present time.

#### DEVELOP A SYSTEM FOR EXCHANGING USED ITEMS

The growing need for sustainable practices and resource conservation has made the exchange of used goods an important focus in reducing waste and promoting a circular economy. This project aims to develop an effective system for the exchange of used items, facilitating the reuse of products that would otherwise be discarded. The system is designed to allow individuals to trade, donate, or acquire second-hand goods, fostering a more sustainable and connected community. Through the use of a user-friendly digital platform, the system enables seamless interactions between users, enhancing accessibility and promoting environmentally-conscious behavior. This paper outlines the process of developing the system, including the research, design, and technical aspects involved in its creation. The system is built to be simple, secure, and efficient, incorporating features such as item listings, user profiles, messaging capabilities, and a rating system for trust-building. The system's impact extends beyond reducing waste, as it strengthens community bonds and encourages a sharing economy, providing economic benefits and enhancing social interactions. Ultimately, the project contributes to a larger goal of sustainability, offering a practical solution for reducing consumption and waste while empowering individuals to make environmentally conscious choices. The system's potential for wide-scale adoption could play a significant role in fostering a more sustainable future.

Monkeypox
Detection System
Based on Skin
Lesion Images Using
Deep Learning

Monkeypox, a re-emerging zoonotic disease, poses significant public health challenges due to its rapid spread and diagnostic complexities. Traditional diagnostic methods, such as polymerase chain reaction (PCR) and serology, are time-consuming, costly, and often inaccessible in resource-limited settings. To address these limitations, this study proposes an automated Monkeypox Detection System based on skin lesion images using deep learning (DL) techniques. The research leverages Convolutional Neural Networks (CNNs) to classify skin lesions into Monkeypox and Non-Monkeypox categories. Three pre-trained models—DenseNet201, InceptionV3, and MobileNetV2—were evaluated on a curated dataset of 228 images (102 Monkeypox, 126 Others). Data augmentation techniques, including rotation, flipping, and brightness adjustment, were applied to enhance model generalizability. Experimental results demonstrated that DenseNet201 achieved perfect classification accuracy (100%), outperforming InceptionV3 (97%) and MobileNetV2 (94%). The model exhibited zero false positives, ensuring high diagnostic reliability. A web-based application was developed to facilitate real-time image uploads and predictions, showcasing the system's potential for deployment in clinical and telemedicine settings. This study highlights the efficacy of DL-based models in enabling rapid, non-invasive Monkeypox detection, particularly in regions with limited healthcare infrastructure. Future work will focus on expanding the dataset, integrating explainable AI techniques, and optimizing the system for mobile platforms.

Assisted Living System for Elderly and Disabled People Currently, elderly individuals and people with special needs face significant challenges in meeting their daily needs. Many of them find themselves living alone without receiving the necessary support. Some struggle to access healthcare services, essential medical equipment such as wheelchairs and assistive devices, and even basic home care. Additionally, reaching specialized treatment centers or obtaining medications can be a burdensome task, especially if they lack the resources or knowledge required. This situation creates a substantial gap in the level of care they need to maintain their health and independence. Therefore, this project aims to build a comprehensive system that provides solutions for this segment of society. The system is designed to help elderly individuals and people with special needs easily access their daily necessities, whether related to healthcare, medical equipment, or even employment. The system will save time and effort by offering various services on a single platform, ensuring an improved quality of life for these individuals and supporting their independence within the community.

INTERACTIVE SIGN LANGUAGE TRANSLATION APP FOR THE DEAF AND DUMB This project focuses on the development of an interactive sign language translation application designed to bridge the communication gap between the deaf and dumb community and the public. The application leverages real-time translation of sign language gestures into text, enabling seamless communication without the need for a human interpreter. By using advanced computer vision and machine learning algorithms, the system recognizes hand gestures and converts them into meaningful text. This innovative solution empowers the deaf and dumb to express themselves freely and fosters greater inclusion in society. The application aims to improve accessibility, enhance communication efficiency, and promote awareness of sign language. Potential future enhancements

	include expanding the system to support various sign languages and incorporating voice recognition for real-time feedback to deaf users.
Cyber security threats detection using machine learning	Nowadays, the volume of data has increased, the risks to which the data may be exposed have increased, and research has become one of the ways to detect threats and risks. In today's digital age, the exponential growth of data has significantly increased both the complexity and volume of information managed across various sectors. With this expansion, the risks to which data may be exposed have also multiplied, including cyber threats, breaches, and unauthorized access. As a result, research has emerged as a critical tool in identifying, understanding, and mitigating these risks. This project aims to explore modern techniques and strategies for detecting data threats, analyzing the vulnerabilities within data management systems, and providing recommendations for enhancing data security. Through in-depth analysis, the research will highlight contemporary methods used to safeguard data and mitigate risks in an evolving digital landscape, so the Machine learning is of rising importance in cybersecurity. The primary objective of applying machine learning in cybersecurity is to make the process of malware detection more actionable, scalable and effective than traditional approaches, which require human intervention. Several machine learning and statistical methods, have proven effective in mitigating cyber-attacks, this survey, the focus is on the machine learning techniques that have been implemented on cybersecurity data to make these systems secure. Existing cybersecurity threats and how machine learning techniques have been used to mitigate these threats have been discussed.
Electric Car Parking Application	As the adoption of electric vehicles (EVs) accelerates globally, the demand for efficient parking and charging solutions has become increasingly critical. This project presents the design and development of an innovative Electric Car Parking Application aimed at enhancing the parking experience for EV users. The application offers a comprehensive solution by integrating real-time availability of parking spots and charging stations, a reservation system, smart payment gateways, and GPSbased navigation to guide users to nearby facilities. Additionally, the app promotes sustainable vehicle practices by offering battery health monitoring and alerts to prevent improper charging behaviors that could damage the battery The application provides an intuitive user interface, ensuring a seamless and user-friendly experience for both EV owners and participating businesses. Collaborations with establishments such as shopping malls and office buildings further enhance the app's effectiveness by listing available parking spaces. The system also allows users to leave feedback, fostering continuous improvement of the service. By addressing critical challenges faced by electric vehicle users—such as limited parking, incompatible charging ports, and battery health—the Electric Car Parking Application aims to promote the growth of electric vehicles and contribute to an environmentally conscious urban future.
STREAMLINEU	This project focuses on the design and implementation of an Online Food Ordering System tailored specifically for students. The system aims to provide a user-friendly platform where students can browse menus, place orders, make secure payments, and track their orders in real time. Vendors are equipped with tools to manage their

	menus, track inventory, process incoming orders, and analyze sales performance. Administrators have access to features for user management, system maintenance, and generating analytical reports. Leveraging a three-tier architecture, the system ensures scalability, maintainability, and a clear separation of concerns. Advanced technologies such as a secure payment gateway, real-time notifications, and role-based access control are integrated to deliver a seamless experience. The agile development methodology enables iterative enhancements based on user feedback, ensuring the system evolves with changing requirements. This project bridges the gap between students and food vendors by addressing the challenges of time constraints, affordability, and operational inefficiencies. The proposed system not only enhances the food ordering experience but also provides valuable insights for vendors and administrators, making it a solution for campus dining needs.
Application for Early Diagnosis of Kidney Failure Using Artificial Intelligence.	Project Overview: Kidney failure, or renal failure, is a life-threatening condition where the kidneys fail to filter waste and toxins from the blood. Early diagnosis is crucial for managing risk factors and seeking timely medical intervention. This project introduces a mobile application leveraging Artificial Intelligence (AI) to support early detection and promote kidney health awareness.  Features and Functions: The app collects key health metrics such as blood pressure, glucose, and creatinine levels. Using AI algorithms, it assesses users' risk of kidney failure and provides real-time alerts and recommendations. It also offers educational resources on kidney health, preventive tips, and strategies for at-risk individuals. A location-based feature helps users identify nearby medical facilities for further care.  Technical Framework: The application is developed with Flutter, a cross-platform framework ensuring compatibility with Android.
Transport Booking Website for Work , School and University Commutes	The new (Transport Booking Website for Work, School and University Commutes) will be a web portal that allow the car owner or bus owner and the person how seek for transportation to register and create their accounts, vehicle / bus owner can create his daily route and his departure and return times , his car or bus specification and the cost for transportation or car sharing . Transportation seeker can search for vehicle owner on his daily route and view if there are some vehicles suitable for him /her, transportation seeker can make transportation order with the selected vehicle owner. So vehicle owner can view and accept or reject the transportation seeker request. Admin has the power to manage the whole system, admin can view the registered users account, he can verify the car owner account. The system website front-end will be HTML pages with CSS, the server side functions with PHP and for the back-end we will use MYSQL server database.
MediCare Application	Some people may have difficulty remembering when to take their medications or obtaining accurate health information, remind the patient For this reason, this application was developed to facilitate the management and tracking of medication intake in an easy and effective manner. The application allows users to organize their medication doses and adhere to the specified schedules for taking them easily. It also serves as a comprehensive tool to support users in monitoring their health and enhancing their self-care. In addition, the application provides

a	accurate health information by displaying normal and abnormal rates for vital indicators such as blood pressure,
	heart rate, and blood sugar levels, which helps users make more informed health decisions.